Commonwealth of Kentucky Division for Air Quality

PERMIT STATEMENT OF BASIS

DRAFT CONDITIONAL MAJOR RENEWAL PERMIT NO. F-06-002
STUPP BRIDGE COMPANY
BOWLING GREEN KY.
April 6, 2006
Plant I.D. # 21-227-00132
Application Log # 55239
A.I. #: 4140
Activity #: APE20020001

SOURCE DESCRIPTION:

Stupp Bridge Company is a bridge fabrication facility. The plant has a long fabrication building with two wings, one for unloading and the other wing for painting and shipping. Steel is unloaded in the west wing of the building. Steel is fabricated according to client specifications. The processes required include heat straightening some parts of the steel. The steel then goes through the shot blaster to prepare the steel for additional processing. The steel is cut using oxy-fuel burning machine. The steel pieces will go through the Ogden Girder Machines to be welded into girders. The edges of the girders require grinding. The girders are sent through a final shot blaster and then primed and painted. For 10% of the jobs no priming or painting required and for 10% of the jobs both priming and painting are required. Additional operations are required for making and attaching stiffeners and other metal pieces include drilling, milling, and cutting. About 30% of the steel requires splicing. After the steel has been fabricated, the steel is loaded and shipped.

Renewal Permit:

Stupp Bridge Company has submitted an air permit renewal application. The source currently holds a conditional major permit # F-98-024 (Revised). There have been no changes in the plant operations since the latest permit revision, F-98-024 (Revised).

The facility is a conditional major source for VOC and HAP. The VOC and HAP conditional major limits will preclude applicability of 401 KAR 59:225, New miscellaneous metal parts and surface coating operations and 40 CFR 63, Subpart MMMM, Miscellaneous metal parts and products surface coating MACT, respectively.

Existing Approvals:

- 1. Conditional Permit No. F-98-024, issued on October 27, 1998 (Log number F747) The initial approval for Bridge & Iron Co. specified terms and conditions for the operation of a Pre-Clean Blast Machine (EP# 1 (02)), Grind Machine (EP#2 (08)), Final Clean Blast Machine (EP# 3 (10)), and Prime & Paint Station (EP# 4 (11)) along with insignificant activities listed in Section C.
- 2. Minor Permit Revision No. F-98-024 (Revised), issued on June 28, 1999 (Log number G048)
 - The plant name changed from Bridge & Iron Co. to Stupp Bridge Company.

APPLICABLE REGULATION:

401 KAR 63:020, Potentially hazardous matter or toxic substances applies to all toxic air emissions. **401 KAR 59:010,** New process operations, is applicable.

EMISSION AND OPERATING CAPS:

401 KAR 59:010, Section 3

- 1. Visible emissions shall not equal or exceed 20% opacity for each applicable process.
- 2. Particulate matter emissions shall not exceed 2.34 pounds/hour for each applicable process.

401 KAR 63:020, Section 3

The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants.

Conditional Major Limitations

Stupp Bridge Company, has requested voluntary permit limits of less than 90.0 tons per year of volatile organic compounds (VOC), 9.0 tons per year of individual hazardous air pollutant (HAP) and 22.5 tons per year of combined HAPs.

Type of control and efficiency:

The Pre-Clean Blast Machine and Final Clean Blast Machine are equipped with Dust Collectors to control particulate emissions with 99.5% collecting efficiency. The spray guns are assumed to have 50% transfer efficiency. There are no controls currently present at the source for VOC and HAP emissions.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.